Breeding. SA-8. GP-318. Pedigree - Selected from 192 cultivars from Mexico, Colombia, Peru, Bolivia, and Thailand. Yield across three acidic sites 2.76 Mg ha-1, outyielding Tuxpeno Sequia (1.08 Mg ha-1), Suwan-1 (1.61 Mg ha-1), and the tolerant check, CMS-36 (1.91 Mg ha-1). Yield on fertile soils 6.53 Mg ha-1, outyielding Tuxpeno Sequia (6.11 Mg ha-1) and Suwan-1 (5.47 Mg ha-1). Plant and ear height, days to 50% silking, and tolerance to diseases, insects, and lodging are comparable to standard maize hybrids and open-pollinated cultivars grown under nonacidic fertile soils in the tropics.

The following were developed by Dennis Thomas, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; Jay Tharp, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; C.D. Nickell, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; Greg Noel, USDA-ARS, University of Illinois, Department of Plant Pathology, Urbana, Illinois 61801, United States; T.R. Cary, Illinois Agricultural Experiment Station, University of Illinois, Dept. of Agronomy, Urbana, Illinois 61801, United States. Received 11/04/1994.

PI 584441. Glycine max (L.) Merr.

Cultivar. Pureline. "YALE"; LN 87-2112. CV-334. Pedigree - F4 plant selection from Sherman x Fayette. Group III maturity (relative maturity 3.8) averaging 5 days later than Resnick and 1 day earlier than Linford. 5% higher seed yield, 12mg seed-1 lower seed weight, 0.5 percentage units lower seed protein and 1.0 percentage units higher seed oil when compared with Linford at SCN noninfested locations. Susceptible to races 1 and 5, moderately resistant to race 2, and resistant to races 3,4, and 14 when evaluated against SCN in the greenhouse. Flowers white. Pubescence gray, Pods tan at maturity. Seeds dull yellow coats and buff hila.

The following were developed by J. Rennie Stavely, USDA, ARS, Microbiology and Plant Pathology Lab., Room 252, Building 011A, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 11/15/1994.

PI 584442. Phaseolus vulgaris L.

Breeding. "BELMIDAK-RUST RESISTANT-1". Pedigree - F5 from Mayflower/4/4-5753/3/Mayflower//NX 040/PI 181996. Plant habit erect, Type II (similar to Mayflower). Maturity rapid, more like the North Dakota than Michigan cultivars. Homozygous for the monogenically inherited, dominant resistance to all 65 available races from PI 181996. Also homozygous for the Up-2 single, dominant gene for rust resistance to about 1/3 of the rust races out of Early Gallatin snap bean through the selected, erect navy bean parental line 4-5753. Seeds white. Plants susceptible to bean common mosaic virus.

PI 584443. Phaseolus vulgaris L.

Breeding. "BELMIDAK-RUST RESISTANT-2". Pedigree - F5 from Mayflower/4/4-5753/3/Mayflower//NX 040/PI 181996. Plant habit erect, Type II (similar to Mayflower). Maturity rapid. Homozygous for the monogenically inherited dominant rust resistance to all 65 available races of bean rust fungus (Uromyces appendiculatus) from PI 181996. Also homozygous for the Up-2 single dominant gene for resistance to about 1/3 of the rust races out of Early Gallatin snap bean through the selected, erect navy bean parental line 4-5753. Seeds excellent white color and desired size. Susceptible to bean common mosaic virus.

PI 584444. Phaseolus vulgaris L.

Breeding. "BELMIDAK-RUST RESISTANT-3". Pedigree - F5 from Mayflower/4/4-5753/3/Mayflower/NX 040/PI 181996. Plant habit erect,